CLAIMS

1. A hardness tester comprising an anvil for supporting an object to be tested, an indenter capable of producing an indentation on the surface of the object being tested and a load mechanism of the indenter comprising a robust stress structure of reference onto which is rigidly fixed said anvil and having at least an arm pivotally connected to the stress structure, carrying at the free end of which said indenter and means for applying a load onto said arm to force the indenter toward said anvil, characterized in that

said means comprise a second arm pivotally connected to a frame of the hardness tester and capable of bearing on said first arm through an unrestrained abutment between a rolling bearing mounted on one of the two arms, the axis of rotation of which orthogonally crosses the trajectory of movement of the tip of said indenter toward said anvil, on a surface of the other arm;

the load being applied on said second arm pivotally connected to the frame through a pivotally held bracket and transmitted to said first arm carrying said indenter through said unrestrained bearing in coincidence with said trajectory of movement.

2. The hardness tester according to claim 1, wherein said rolling bearing is a ball or roller bearing.

3. The hardness tester according to claim 1, wherein said rolling bearing is mounted on said second arm and bears on the surface of a force pad solidly connected to said first arm.

4. The hardness tester according to claim 1, wherein said first arm is sustained by said second arm through a spring.